

PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 5

**Complete if Known**

Application Number	09/747,295
Filing Date	12/22/2000
First Named Inventor	Spencer A. Rathus
Art Unit	2876
Examiner Name	Le, Thien Minh
Attorney Docket Number	660-030

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	1	US- 3,705,384	12-05-1972	Wahlberg	
	2	US- 3,735,350	05-22-1973	Lemelson	
	3	US- 3,976,995	08-24-1976	Sebestyen	
	4	US- 4,117,542	09-26-1978	Klausner et al.	
	5	US- 4,283,621	08-11-1981	Pembroke	
	6	US- 4,601,573	07-22-1986	Utsugi	
	7	US- 4,659,213	04-21-1987	Matsumoto	
	8	US- 4,711,994	12-08-1987	Greenberg	
	9	US- 4,723,212	02-02-1988	Mindrum et al.	
	10	US- 4,793,813	12-27-1998	Bitzer et al.	
	11	US- 4,812,879	03-14-1989	Suzuki	
	12	US- 4,820,167	04-11-1989	Nobles et al.	
	13	US- 4,839,507	06-13-1989	May	
	14	US- 4,897,865	01-30-1990	Canuel	
	15	US- 4,910,672	03-20-1990	Off et al.	
	16	US- 4,984,155	01-08-1991	Geier et al.	
	17	US- 5,002,491	03-26-1991	Abrahamson et al.	
	18	US- 5,021,984	06-04-1991	Meade et al.	
	19	US- 5,027,196	06-25-1991	Ono et al.	

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	20	DE 2452202 A1	11-20-1975	Waterbury		
	21	JP 60-46,684	03-13-1985	Masaaki et al.		
	22	JP 62-98,334	05-07-1987	Yoshitomo, Abe		
	23	EP 357899 A	03-14-1990	Schulz		
	24	GB 2 232 119 A	12-05-1990	Webster et al.		
	25	JP 02103025 A	04-16-1990	Hirata, Hideyuk		

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Signature

LE THIEN

Date

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9/20/02

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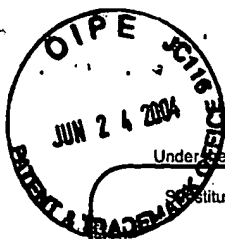
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Sheet 2 of 5**Complete if Known**

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	26	US- 5,031,098	07-09-1991	Miller et al.	
	27	US- 5,111,196	05-05-1992	Hunt, Peter F.	
	28	US- 5,119,188	06-02-1992	McCalley et al.	
	29	US- 5,158,310	10-27-1992	Tannehill et al.	
	30	US- 5,168,303	12-01-1992	Ikenoue et al.	
	31	US- 5,173,851	12-22-1992	Off et al.	
	32	US- 5,181,062	01-19-1993	Kazumi, Jiro	
	33	US- 5,204,813	04-20-1993	Samph et al.	
	34	US- 5,222,624	06-29-1993	Burr	
	35	US- 5,235,509	08-10-1993	Mueller et al.	
	36	US- 5,262,860	11-16-1993	Fitzpatrick et al.	
	37	US- 5,287,181	02-15-1994	Holman	
	38	US- 5,287,266	02-15-1994	Malec et al.	
	39	US- 5,288,977	02-22-1994	Amendolia et al.	
	40	US- 5,295,064	03-15-1994	Malec et al.	
	41	US- 5,295,836	03-22-1994	Ryu et al.	
	42	US- 5,302,990	04-12-1994	Satoh et al.	
	43	US- 5,310,349	05-10-1994	Daniels et al.	
	44	US- 5,353,219	10-04-1994	Mueller et al.	

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	45	JP 02127792 A	05-16-1990	Oki, Shinji		
	46	JP 03151263 A	06-27-1991	Osawa		
	47	JP 03174693 A	07-29-1991	Ashida et al.		
	48	JP 04-023,183	01-27-1992	Masahide		
	49	JP 06110913 A	04-22-1994	Watanabe		
	50	JP 6-233,159	08-19-1994	Tsutomu		

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Signature

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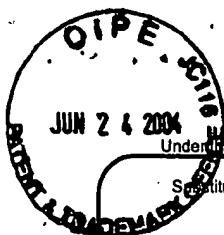
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Sheet 3 of 5

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First Named Inventor	Spencer A. Rathus
Art Unit	2876
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Attorney Docket Number	660-030

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		Number-Kind Code <sup>2</sup> (if known)			
	51	US- 5,368,129	11-29-1994	Von Kohorn	
	52	US- 5,369,571	11-29-1994	Metts	
	53	US- 5,385,371	01-31-1995	Izawa	
	54	US- 5,385,475	01-31-1995	Sudman et al.	
	55	US- 5,397,156	03-14-1995	Schach et al.	
	56	US- 5,401,944	03-28-1995	Bravman	
	57	US- 5,410,642	04-25-1995	Hakamatsuka et al.	
	58	US- 5,412,191	05-02-1995	Baitz et al.	
	59	US- 5,451,998	09-19-1995	Hamrick	
	60	US- 5,452,379	09-19-1995	Poor	
	61	US- 5,493,355	02-20-1996	Kazami	
	62	US- 5,500,681	03-19-1996	Jones	
	63	US- 5,505,494	04-09-1996	Belluci et al.	
	64	US- 5,506,697	04-09-1996	Li et al.	
	65	US- 5,551,011	08-27-1996	Danby et al.	
	66	US- 5,555,496	09-10-1996	Tackbary et al.	
	67	US- 5,559,714	09-24-1996	Banks et al.	
	68	US- 5,578,797	11-26-1996	Hewitt et al.	
	69	US- 5,612,868	03-18-1997	Off et al.	

**FOREIGN PATENT DOCUMENTS**

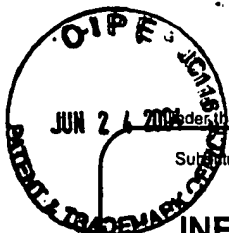
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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	70	JP 07056941 A	03-03-1995	Tanaka et al.		
	71	JP 7-64,169	03-10-1995	Masaru, Mase		
	72	JP 11-355,699	06-05-1998	Yukihiro, Sai		
	73	JP 10269326 A	10-09-1998	Nakamura et al		
	74	JP 2001/142971	05-25-2001	Atsushi		

Examiner Signature	<i>L. E. THIE</i>	Date Considered	9/30/01
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	75	US- 5,615,123	03-25-1997	Davidson et al.	
	76	US- 5,644,408	07-01-1997	Li et al.	
	77	US- 5,751,590	05-12-1998	Cannon et al.	
	78	US- 5,801,944	09-01-1998	Kara	
	79	US- 5,870,030	09-11-1998	Deluca et al.	
	80	US- 5,872,589	02-16-1999	Morales	
	81	US- 5,948,040	09-07-1999	DeLorme et al.	
	82	US- 5,978,013	11-02-1999	Jones et al.	
	83	US- 5,978,648	11-02-1999	George et al.	
	84	US- 5,995,105	11-30-1999	Reber et al.	
	85	US- 6,002,491	12-14-1999	Li et al.	
	86	US- 6,064,832	05-16-2000	Sato et al.	
	87	US- 6,072,186	06-06-2000	Yokonuma et al.	
	88	US- 6,085,976	07-11-2000	Sehr	
	89	US- 6,095,418	08-01-2000	Swartz et al.	
	90	US- 6,149,441	11-21-2000	Pellegrino et al.	
	91	US- 6,269,342	07-31-2001	Brick et al.	
	92	US- 6,270,351	08-07-2001	Roper	
	93	US- 6,311,214	10-30-2001	Rhoads	

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Sheet 5

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15

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09/747,295

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12/22/2000

First Named Inventor	Spencer A. Rathus
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Spencer A. Rathus

Art Unit	2876
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2876

Examiner Name	Le, Thien Minh
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Attorney Docket Number	660-030
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660-030

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